

Cracklin' Static

December 2017 Edition



Breakfast Meeting – Sat, Apr 7th

Boomtown Casino Hotel
Events Center
I-80 at Exit 4 in Verdi

Breakfast Buffet – 7:30am - \$12
General Meeting – 8:00am

Featured Presentation

Jeff Hilliard, AK6OK

President and CEO of Compudigital Industries, Rocklin, CA

Presentation on Kenwood TS Upgrade Kits

SNARS NOON NET – Weekdays

12:00PM - SNARS Linked Systems
<http://snars.org/nets>

SNARS NET on DMR – Tuesday 8pm

DMR Talk Group: 31328 SNARS

SNARS Treasury – As of 2 April 2018

Checking:	\$8153.00
Savings:	\$5535.00
PayPal:	\$1466.00
Self Insurance:	\$1071.00
Convention Fund:	\$5582.00
Total	\$21807.00

SNARS Membership – ending Mar 31

Technician:	115
General:	97
Advanced:	16
Extra:	122

SNARS Members 352

President's Voice



President Anthony Marcin, W7XM

Email: w7xm@snars.org | Telegram: @w7xm_nv

Welcome to April! I will be attending NAB next week to help work the ARRL Booth along with being present for advertising our two big events this year, NVCON 2018 and Nevada QSO Party. Both events are moving forward and both planning teams are doing a great job! Very excited and proud we have a great group doing some great things this year for the amateur radio community.

Not much else to report this month as all systems are working good, looking at restoring the IRLP at GSR hopefully this month with a new IRLP computer and of course getting network ran at the site. You might also find a last minute announcement of one of us setting up a Ham Radio Station in the Park to invite those wanting the learn and or operate due the nice weather as of late. Stay tuned to Facebook, Telegram and of course email.

That is all I have for this month!

73,
Tony, W7XM



PO BOX 7727 Reno NV 89510
Yearly Dues: \$40.00 Individual • \$50.00 Family
775.453.4142 <http://snars.org>

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Cracklin Static Publication

Editor: Howie Holden **WB2AWQ** - holden7471@msn.com

Cracklin' Static is the Newsletter of, and sponsored by the Sierra Nevada Amateur Radio Society. Opinions expressed herein are those of the editors and contributors and should not be considered as official expressions of the Club Officers, Staff or Club Members, or as endorsements by same.

Material for publication may be edited to enhance readability or to save space. We reserve the right to use whatever font size or line spacing may be required to publish this Newsletter. **Deadline for input to the newsletter is 1500 hours on the Sunday** prior to the 1st Saturday of each month.

SNARS Wide Area Linked System

147.030 + PL 123.0	Sparks, Fernley, Fallon	Online
147.210 + PL 100.0	Reno, Sparks	Online
147.150 + PL 123.0	Lake Tahoe, Truckee, Carson	Online
146.925 - PL 123.0	Lovelock, Fallon	Online
146.670 - PL 123.0	Winnemucca	Online
444.875 + PL 100.0	Yerington	Online
444.125 + PL 123.0	Reno Sparks	Offline

DMR Systems

444.925 + CC 1	Reno, Sparks	Online
444.825 + CC 1	Dayton, Fallon, Carson	Online
443.925 + CC 1	Lake Tahoe, Truckee, Carson	Online
443.950 + CC 1	Incline Village	Online
442.875 + CC 1	Sparks, Fernley, Fallon	Online
442.050 + CC 1	Downtown Reno	Online
441.950 + CC 1	Fallon, Fernley	Online
442.850 + CC 1	Carson City, DEM	Online

Fusion Systems

146.610 - PL 123.0	Reno, Carson, Dayton	Online
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IRLP / EchoLink Systems

147.300 + PL 123.0	Reno, Sparks	Online
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Packet / APRS

145.050 - RNO	Reno, Carson, Dayton	Online
145.050 - ROSE	Lake Tahoe, Truckee, Carson	Online
144.390 - TOULON	Lovelock, Fallon	Online

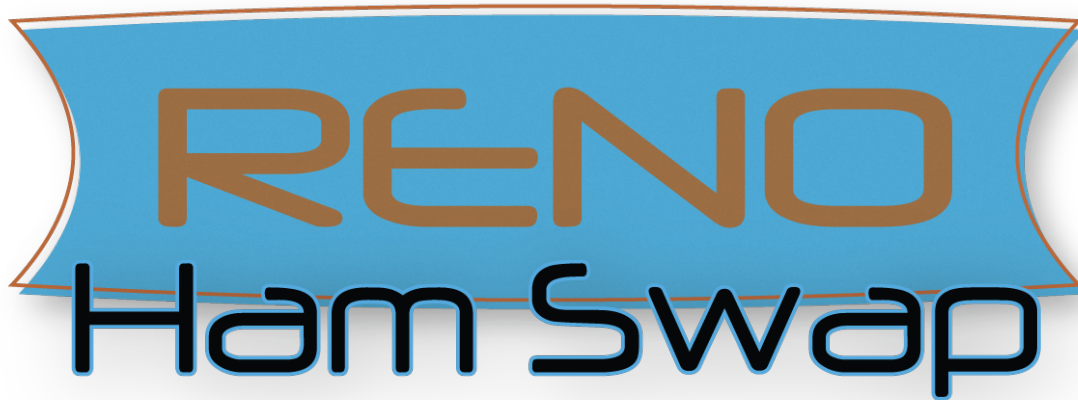
Standalone Systems

147.390 + PL 100.0	Reno, Carson, Dayton	Online
443.075 + PL 123.0	Reno, Carson, Dayton	Online
927.0875 + PL 114.8	Reno, Carson, Dayton	Online

 Online  Offline  Not Linked

Thank you to our Sponsors/Supporters





Saturday, May 12, 2018

Cabela's – East Parking Lot
8650 Boomtown Garson Road, Reno, NV

Seller Setup @6:30AM

\$10.00 Per Space

Open to Public @7:00AM

Free to Browse and Buy

Donuts / Coffee

\$2.00 Donation

Raffle Drawing @ 10AM

HT Radios and More

Talk-In Frequency 147.210 PL 100.0
DMR Talk Group: SNARS 31328

RenoHamSwap.com

Brought to you by the Sierra Nevada Amateur Radio Society -- <http://snars.org>

Weekday on the SNARS Linked System

147.030 + PL 123 – Sparks/Fernley
 147.150 + PL123.0 – Lake Tahoe / Truckee
 147.210 + PL 100.0 - Reno
 444.875 + PL 100.0 - Yerington
 146.925 - 123.0 – Lovelock / Fallon
 146.67 – PL 123.0 - Winnemucca

Monday through Friday @ 12:00pm

Open to all amateur radio operators. A general informational net for the amateur radio community of Northern Nevada and Eastern California. Radio Checks and Questions are welcomed.

Nets on the SNARS Linked Systems

147.210 + 100.0 | 147.030 + 123.0 | 147.150 + 123.0
 147.670 – 123.0 | 146.925 – 123.0 | 444.875 + 100.0

Bishops Storehouse Net	Monday @ 9:15pm
N. Western NV ARES Net	Monday at 7:30pm
Northern Nevada Preppers Net	Wednesday @ 8:00PM
Hospital Net	Friday @ 10:00AM

Nets on IRLP (GSR) System

Repeater: 147.300 + 123.0

Amateur Radio Newsline	Monday - 8:00PM
Nevada Skywarn Net	Wednesday - 7:00pm
Nevada State ARES Net	Thursday - 7:00PM

Nets on Simplex/HF

Jefferson Noon Net	7.204 LSB	Daily - 12:00pm
6 Meter Net	50.350 USB	Tuesday – 8:00pm
2 Meter Week Signal	144.250 USB	Wednesday - 8:00PM
2 Meter Simplex Net	146.500 FM	Thursday – 8:00PM
10 Meter Net	28.350 USB	Sunday – 2:00PM

SNARS Weekly DMR Net – Tuesdays 8:00PM

SNARS Talk Group 31328

Open to Members and Guests. A general information net each week on DMR.

SNARS CALENDAR

SNARS Board Meeting Wednesday, April 11, 6 PM
 Sully's Sports Bar in Tamarack Junction, 13101 S. Virginia, Reno

Reno SNARS Meetup Wed, 18, 6pm – 7pm
 Reno Black Bear Diner, 2323 S. Virginia St., Reno

SNARS VE Session Saturday, April 21, 9 AM to noon
 Washoe Regional Emergency Operations Center
 5195 Spectrum Blvd, Reno. See <https://SNARS.org/exams>

Next SNARS Breakfast Meeting – Sat, May 5, 8 AM
 Boomtown Casino Hotel Events Center
 I-80 at Exit 4 in Verdi

WELCOME NEW MEMBERS

Johann	Thomsen	KI7UQU
Doug	Cameron	K2DMC
Rex	Fraizer	KF6ESD
William	Ryan	KI7UQT
Timothy	Renollet	K9TSR
Jolee	Renollet	KJ6HSG
Marc	Harper	AC8MH
Gershon	Negev	AG7MD
John	Prouty	AG6PN
Joshua	Demcak	KI7VQK
Daniel	Sohn	WL7COO
Gino	Calestini	KG7POU
Ty	Chamberlain	KM6RSE



Nevada State Amateur Radio Convention

NVCON

RENO-TAHOE 2018

July 20 - 22, 2018

Boomtown Casino Hotel • Reno, NV

● **Friday Amateur Radio Academy**

DX, Contesting, HF Digital, VHF/UHF Digital

● **Table Talks**

Round table discussions with Subject Experts

● **Amateur Radio Forums**

Presentations on Amateur Radio Related Topics

● **Exhibitors & Vendors**

Popular Amateur Radio Vendors and Exhibitors

● **Saturday Ham Swap**

Sell, Buy, Trade starting at 6am

● **Radio Exams**

Tech, General & Extra Exams

● **Raffle Prizes**

Amateur Radio Raffle Prizes

● **and more**

visit <http://nvcon.org> for more info

<http://nvcon.org>

THE NAME OF THE GAME

Jim Shepherd, W6US nvjims@gmail.com

7TH AREA QSO PARTY – DRESS REHEARSAL FOR THE NEVADA QSO PARTY

The 7QP is an amateur radio QSO party, held annually on the first Saturday in May. That's May 5th this year. The stations of the US 7th call area (Arizona, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming) become "the pursued", and the rest of the US, Canada and the world tries to work as many of us, on as many bands/modes as possible, over an 18-hour period commencing at 6:00am PDT (1300 UTC).

This year, we are going to have a QSO party of our own in October, and the 7QP will be an excellent opportunity to get some practice in before our big party!

Operate from home, mobile or dust off the Field Day gear and get on the air from a rare county or a county line where you can operate from two counties at once and get double points! Please plan on making a few or a whole bunch of contacts, just be sure to mark May 5 on your calendar! Yes, that is the club meeting date at Boomtown, but you can work the contest the rest of the day.

We are trying to get all 17 Nevada counties on the air. Go portable and blow the carbon out of the generator or stay home and try out that new wire antenna. Or go mobile and activate several counties in your area. Visit the 7QP website: www.7qp.org for additional information. May is a good time for an early camping trip out to some of the less populated rural counties.

Contacts can be made using SSB, CW, and Digital modes and each mode counts as a different contacts. You can also contact the same station on different bands for credit. You can use 160, 80, 40, 20, 15, 10, 6 and 2m (simplex only, no repeaters)

If you plan to participate, even for a little while, do two things. First, let them know so they can put your activity on the [Planned Operations](http://ws7n.net/7QP/new/Page.asp?Content=START&Page=2) (<http://ws7n.net/7QP/new/Page.asp?Content=START&Page=2>) tab on the 7QP page. That way they can track the counties that will be covered

and we can try to find someone to go out to the counties that are not. Even if the county is covered, digital and CW operators are encouraged to also go out there... Second, email them a copy of your log when you are finished. Either Cabrillo (preferred) or ADIF format will work. Your log helps them score the contest and automatically enters you – no summary sheet required for email entries. See their webpage for more information on uploading your log.

The exchange is easy... Just give a '59' signal report and if you are operating in the 7 call zone, your county code. For Washoe, it is NVWAS, for Storey, it is NVSTO... If you are outside of the 7 call zone, you give a '59' signal report and your 2 digit state abbreviation. There are special rules for county line stations, and you may get a report from one of the eastern states that are also having a QSO party. See the complete rules on their website for more information and a full list of county abbreviations.

There are a couple of other QSO parties that weekend so there is a lot of activity. The N1MM Logger will handle all of the contests at the same time so you only have to send copies of your Cabrillo log to each of the different sponsors. Nebraska, Indiana and Delaware are currently the other states—be sure to check their rules if you intend to play with them.

In October, we will have the Nevada QSO party and we will need veteran operators in all the counties and on all of the modes. We will have a special VHF class that will allow the use of repeaters which will get a lot more people involved. Check out our website at <http://nvqso.com/>

Nevada is a semi-rare state and some of the counties are very hard to work. These two contests will help to fill some holes in the logbooks. A good turnout for the 7QP will help with increased participation for our NVQSO Party!



**Activate and Work all
17 counties in Nevada!**

Friday, Oct 12 - Sunday Oct 14

<http://nvqso.com>

For Information and Updates

MY (CONTEST) STATION

Jim Shepherd W6US

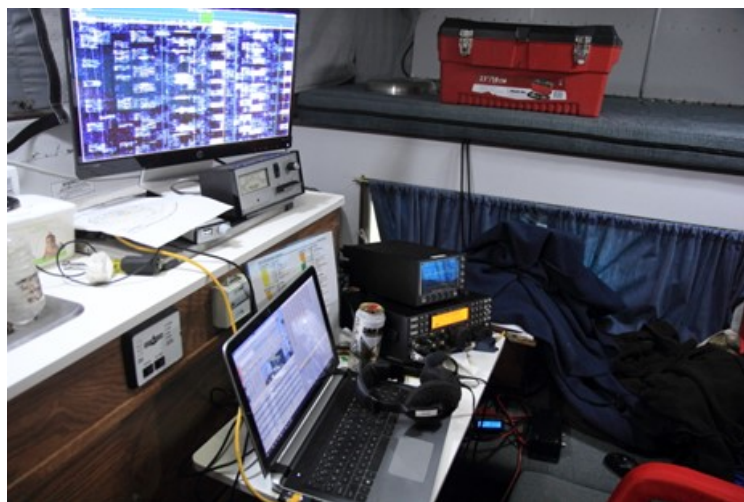
Between the RF noise and lack of room to put up big antennas at my place in Sparks, I travel to my property out south of Winnemucca to use real antennas in a quieter rural area.

Those who have been to the last two Field Days have seen my tower trailer, and I have it parked out there. Currently I have a Hy-Gain Tribander on the tower with an Alliance HD-73 rotor, but I also have a Cushcraft 5 element beam on 6 meters, a M2 18 element on 2m, and a M2 20 element on 432 that can go up there for the VHF+ contests. Currently using 9913 low loss coax to get the signals to the rig. This year I added a Hustler 6BTV with 30 radials on the alkaline soil out there. I have various other wire antennas. You can see a 40m sloper aimed at Europe on the right side of the photo and the wire going off the top of the picture is the half wave inverted V on 160 meters.



Jim's setup in Winnemucca

I pull my camper up next to the tower to keep the feed-lines short as possible, and that is my operating position. I have 120Vac power, but I use it for the battery charger on the trailer and bring 12Vdc from the 600Ahr batteries to the camper system which has 2-100Ahr batteries. I have a buck'n'boost power regulator that sends 13.8Vdc to the radio no matter if the batteries are lower. The 120Vac also drives other equipment including a small heater to keep me warm during the colder contest weather.



The Rig Inside the Camper

I'm currently running an Elecraft K3s which gives me 100 watts on 160-6 meters. I have the P3 panadapter with the SVGA card to drive the 20" monitor. This lets me see clear air to try and run some contacts and a good view of the band conditions. Laptop computer and rotor controller complete the station.



Waterfall Display

During the ARRL SSB DX contest, 20 meters was wall-to-wall signals as you can see from this shot. It was a fun contest.

SNARS LOGO ITEMS

This year we are celebrating our 50th year by providing many ways to commemorate this occasion by imprinted our 50th



Stickers \$1.00 Each



16oz Coffee Mugs \$8.00



Hats \$10.00



Club Badge \$15.00

Order at

<http://snars.org/store/badge-order>

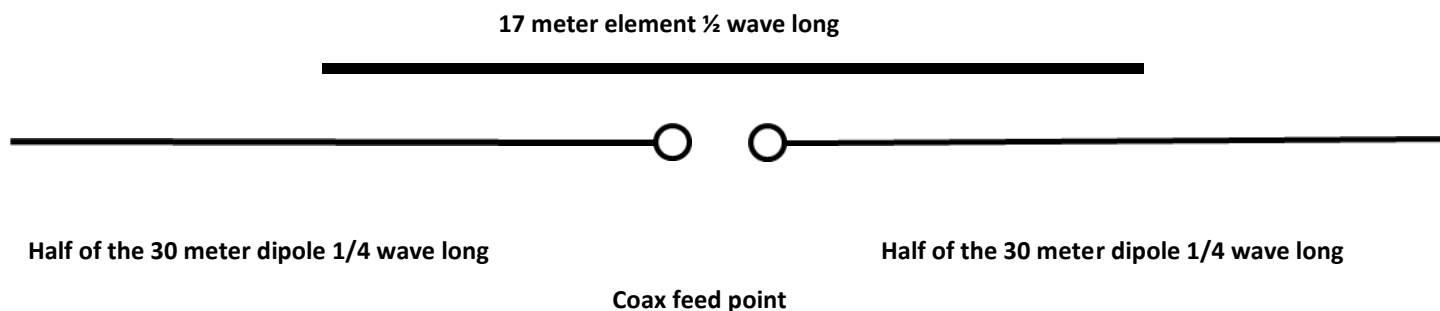
Items are available at the monthly meetings, events or online (coming soon) <http://snars.org/store>

THE COUPLED RESONATOR ANTENNA

Howie Holden WB2AWQ

Some time ago I wrote an article on my stealth antennas. One of those antennas (actually 3 antennas, for 30, 20, and 15 meters) was a fan dipole, in which there is one set of dipole elements for each band of interest, lengths according to the frequency, attached to the center feed point. I used that dipole, mounted on a privacy fence, for about 6 years. It has worked well, but just for giggles I decided to change things around a bit. I moved 20M to a tree-mounted vertical, and put 17M in its place on the fan dipole. Now, a fan dipole can be a bit of a challenge to set up, simply because having multiple elements connected to the feed point messes with the element lengths required for resonance. You get one antenna set, add another and it messes up the first, etc. My original fan dipole had three sets of elements, and I danced back and forth quite a while getting them all resonant where I wanted them. Add to that, working with very low antennas also messes with element lengths, requiring normally that they be shorter than the formula says (half wave = $468/\text{Freq Mhz}$). I've found, from much playing with low antennas that typically at the 6-7 foot level, an antenna will be 3 to 10% shorter than formula, due primarily to ground losses. Lower frequencies are at the upper end of the percentage range.

The Coupled Resonator antenna is nothing new – it's been around for ages, used in some beams, but hasn't, until recently, received much attention. Basically, it's a standard dipole or vertical (or beam driven element) cut to formula for a given band, with a parallel element set very close, not connected to it, cut for a different band. IE, a 30M dipole, with a parallel wire cut for 17M, with no connection between them. The very close coupling between elements means high efficiency. The basic setup for a coupled resonator for 30 and 17M:

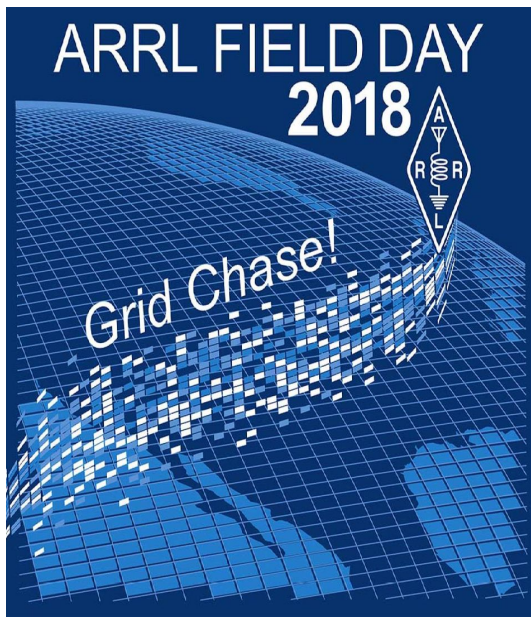


This is obviously not to scale! I first set up the 30M dipole, which because of the low height turns out to be about 4% shorter than formula (46'4"), in this case 44'5" ft overall. The antenna analyzer shows it to be resonant at 10.1 Mhz (I'm mainly a CW op so low end is good), with a 40 ohm feedpoint impedance and very low reactance, SWR of about 1.3. I added the 17M element about 1 inch above it, (it too had to be shorter, about 4%, or 24'10" overall), and the 30M element seems to be totally unaffected, not changing resonant frequency significantly or showing any added reactance. On 17M the system is resonant at 18.07 Mhz, little reactance and SWR of 1.1. I also added a 15M element about 3/4 inch below the 30M. It, like the first two, had to be shorter, about 3%, and did not affect the 30 or 17M elements, registering resonance at 21.0 and SWR of 1.3. Note that due to the low height of my dipoles, the impedance at the center is not the storied 72 ohms, predictably it's much closer to 50 ohms on 30 and 17, and only 35 on 15M.

One negative characteristic of a C-R antenna is that the bandwidth for each element tends to go down as frequency goes up, opposite that of a stand-alone dipole. Thus the 30M SWR 2.0 antenna bandwidth is about 300Khz, 250Khz on 17M, and only 200Khz on 15M. For me this is not an issue because I'm primarily interested in only one mode/area of operation.

The ARRL Antenna Handbook has a section on C-R antennas, and there's a formula to calculate the spacing between wires but I'm too lazy for that! Their examples were for 14 ga wire with a 2 inch spacing or some aluminum tubing with a 7 inch spacing. I deduced that smaller wire needs less spacing. For my stealth antennas I'm working with #26 magnet wire, so I opted for 3/4 to 1 inch spacing which works just fine on both 17M, and 15M without upsetting the 30M. It's good enough for me, 1.3 SWR really isn't much of a loss. I'm feeding with 50 ft of RG-8X, and the matched coax loss on 30 M with 100 watts is about 10 watts and about 15 watts on 15M. The mismatch loss is less than an additional 1 watt on any of these bands, so no need to fix what ain't broke....

Making multiband dipoles this way, without resorting to open feeders and tuners, is so much easier than the multi-element fan dipole due to the ease of pruning where one antenna does not materially interfere with the others. The coupled resonator principle can also be applied to vertical antennas, beams, most any antenna where the length from feed to an end of the antenna is 1/4 wavelength. As for the end result – do they work? – yep. While I'll never be king of the DX pileups, I work my share, and the antennas are invisible unless you are up close.



ARRL FIELD DAY 2018

June 22, 23 & 24, 2018

Washoe Lake State Park

Join us if you are a licensed amateur radio operator or are interested in learning more about amateur radio.

Visit <http://snars.org/fieldday> for more information, schedule and to **sign up for our annual Field Day BBQ!**

What is Field Day?

Since 1933, ham radio operators across North America have established temporary ham radio stations in public locations during Field Day to showcase the science and skill of Amateur Radio. This event is open to the public and all are encouraged to attend.

For over 100 years, Amateur Radio — sometimes called ham radio — has allowed people from all walks of life to experiment with electronics and communications techniques, as well as provide a free public service to their communities during a disaster, all without needing a cell phone or the Internet. Field Day demonstrates ham radio's ability to work reliably under any conditions from almost any location and create an independent communications network. Over 35,000 people from thousands of locations participated in Field Day in 2016.

Anyone may become a licensed Amateur Radio operator. There are over 725,000 licensed hams in the United States, as young as 5 and as old as 100. Join us and come operate and learn about amateur radio!

Field Day Schedule

Friday, June 22, 2018

12:00PM Setup Radios, Tower, Antennas

Saturday, June 23, 2018

7:00AM Setup / Breakfast

11:00AM Start Making Radio Contacts Over the Next 24 hours

12:30PM Lunch

6:00PM Social Hour / Raffle Tickets

7:00PM BBQ Dinner host by SNARS

8:00PM Raffle Drawing

Sunday, June 24, 2018

8:00AM Breakfast

11:00AM Radio Contacts Ends

12:00PM Tear down Radios, Equipment



MIKE'S MISSIVES CHAPTER THIRTY FOUR

Mike Katz, N7MSK

Part 97 --- Third Party Communications

An amateur station may transmit messages for a third party to:

(1) Any station within the jurisdiction of the United States .

(2) Any station within the jurisdiction of any foreign government when transmitting emergency or disaster relief communications and any station within the jurisdiction of any foreign government that has made arrangements with the United States to allow amateur stations to be used for transmitting international communications on behalf of third parties. No station shall transmit messages for a third party to any station within the jurisdiction of any foreign government whose administration has not made such an arrangement. This prohibition does not apply to a message for any third party who is eligible to be a control operator of the station.

The third party may participate in stating the message where:

- (1) The control operator is present at the control point and is continually monitoring and supervising the third party's participation; and
- (2) The third party is not a prior amateur service licensee whose license was revoked or not renewed after hearing and re-licensing has not taken place; suspended for less than the balance of the license term and the suspension is still in effect; suspended for the license term and re-licensing has not taken place; or surrendered for cancellation following notice of revocation, suspension or monetary forfeiture proceedings. The third party may not be the subject of a cease and desist order which relates to amateur service operation and which is still in effect.

(c) No station may transmit third party communications while being automatically controlled except a station transmitting RTTY or no data emission.



NAME THAT RIG



(answer on page 9)

FUN STUFF FOR APRIL

Looking for some excitement on the bands during April? If you're into state QSO parties, April is your month.....no less than 8! The contests in **bold** may qualify for the ARRL club contest competition.

15 Apr 1800 to 15 Apr 2359 3.5-50 ARRL Rookie Roundup, SSB Ph
www.arrl.org/rookie-roundup

7 Apr 1400 to 8 Apr 0200 3.5-UHF Mississippi QSO Party CW Ph Dig
www.arrlmiss.org

7 Apr 1400 to 8 Apr 2000 1.8-UHF Missouri QSO Party CW Ph
www.w0ma.org

14 Apr 1400 to 15 Apr 0200 1.8-50 New Mexico QSO Party CW
PhDig www.newmexicoqsoparty.org

14 Apr 1800 to 15 Apr 1800 1.8-144 North Dakota QSO Party CW Ph
Dig www.kg0yl.net/QSO.html

14 Apr 1800 to 15 Apr 2359 1.8-50 Georgia QSO Party CW Ph Dig
www.georgiaqsoparty.org

21 Apr 1300 to 22 Apr 2200 1.8-UHF Nebraska QSO Party CW Ph Dig
qcwa.org/chapter025.htm

21 Apr 1600 to 22 Apr 0400 3.5-28 Michigan QSO Party CW Ph
www.miqp.org/Rules.htm

28 Apr 1600 to 29 Apr 2159 7-28 Florida QSO Party CW Ph
floridaqsoparty.org/rules

A complete list of contests is available at:
<http://www.arrl.org/files/file/Contest%20Corral/2018/April%202018%20Corral.pdf>

If you're not into contests, there's always DX to chase, and April has some great ones! Some of the better DX operations coming up in April:

Apr 01 to Apr 09 **Cape Verde Is D4IA**

Apr 01 to Apr 30 **Wake I KH9**

Apr 02 to Apr 13 **Gambia C5WP**

Apr 04 to Apr 11 **Bhutan A5A**

Apr 05 to Apr 17 **Agalega & St Brandon 3B7A**

Apr 08 to Apr 15 **Tuvalu T2AR**

Apr 15 to Apr 22 **Kosovo Z66D**

Apr 15 to Apr 28 **Senegal 6W**

Apr 17 to Apr 29 **Vanuatu YJ0AG**

Apr 22 to Apr 25 **Solomon Is H44R**

Apr 27 to May 04 **Market Reef OJ0W**

Apr 29 to May 03 **Temotu H40D**

Apr 29 to May 05 **Mozambique C96RRC**

Apr 29 to May 03 **Temotu H40D**

Visit <http://www.ng3k.com/Misc/adxo.html> for current info and full lists!

FIELD DAY LOCATION IS SET

Mark your calendar for June 22-24 for Field Day 2018! This year we will be at Washoe Lake State Park again. However this time we will be in the Main Group Area, which is South of the main entrance. We hope to have at least 7 stations working and perhaps more. Depending on conditions we plan to run at least 3 bands in 3 modes at the same time. The three modes we plan to operate are CW, Voice and Digital. This year FT8 should be the digital mode du jour.

This Field Day as in the past will be run as Category Class A. Class A means we will run the radios from non commercial power mains. All equipment will be placed within a 1000 foot diameter circle. We will start setting up antennas and radios starting Friday June 22. The excitement begins at 1800 UTC (1100 PDT) June 23 and winds down at 1800 UTC (1100 PDT) June 24. As in the past the club will provide logging computers and software.

Even if you don't own radio gear come out and give the operators a break or learn how to work contests. The club will have available Yaesu FT-450s to operate along with other members' radios.

As last year we will have a Saturday group dinner and prizes. There will be a small fee (TBD) to cover the cost of food. Dinner will be at 7pm on Saturday night for all, and plenty of water/soda and snack items during the event. Those who come out to help with the setup on Friday will have a special reward.

After the radios go silent on Sunday, there will be a lot of work to be done to get everything packed up so we can clear the site by 4pm. Everybody is welcome to come and participate—we will be calling for volunteers for various functions in the coming months before Field Day. For more information or to offer to volunteer to help, contact Rob Dunbar nb6c@snars.org.

NAME THAT RIG (from pg 8)

For about two decades, **Multi-Elmac** radios were popular with the Amateur crowd in the 50s and 60s. Their best known, most popular setup was the combo of **AF68 transmitter and PMR8 receiver**, first debuted in 1960. The pair covered 80 through 6 meters. The transmitter used a 6146 final at 60 watts input, modulated by 6L6's. The receiver was a nine tube dual conversion superhet. Both were known for good audio quality, excellent overall performance, and straightforward solid construction. The matching power supply ran on either 120VAC or 12VDC, and the pair was often found in mobile applications. Unfortunately, while Multi-Elmac made good radios, they didn't manufacture interconnecting cables, either between the two or to necessary mating power supplies. Hams were expected to fashion their own cabling. Yours truly, running a lot of ten meter AM back in the late 60s from my own station KG4DF in Guantanamo Bay, Cuba worked many a Multi-Elmac pair. In the mid-70s Multi-Products Co was bought by the Stanley Company, which made garage door products. Go figure!

STUFF WANTED!

This issue and the previous one of Cracklin Static have had some pretty unique Amateur stations featured: Peter KE7VSR and his 18-wheel setup, and Jim W6US with the monster 100 ft "portable" tower gracing the skies in Winnemucca.

Think you've got a neat station? Even if YOU don't think so, someone else might! Why not get your station featured here? Grab your smart phone, or digital camera, snap a few good photos, pen up a nice description and send the whole mess my way. I'm always looking for this sort of stuff, or maybe your unique QSL card, or perhaps you have the idea for a ham-related article that would be of interest to others. If you need assistance setting up an article, I'm available to help. Whatever, why not get your station/QSL/article published here?

73, Howie WB2AWQ CS Editor holden7471@msn.com

ARES NEWS

ANNUAL COMMUNICATIONS CALENDAR 2018 CARSON VALLEY, TAHOE, RENO, PLUMAS COUNTY

EVENT 2018	DATE	DATE END	SPONSOR/ORGANIZER	COORDINATOR	CONTACT
Reno 5000-1	4/29/18		Dolan Auto Group	Doug KA7FOO	ka7foo@gmail.com
SAGAN FONDO	5/5/18		Peter Sagan	Doug KA7FOO	ka7foo@gmail.com
Incline Village Evacuation Exercise	5/19/18		Washoe County	Doug KA7FOO	ka7foo@gmail.com
Silver State 50/50 race	5/19/18		Silver State Striders	Steve KS6A	ks6a@sbcglobal.net
Indian Valley Century Bicycle Ride	5/26/18		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
Lost and Found Gravel Grinder SBTS	6/2/18		Plumas ARC	Brian KJ6EAC	brianv@psln.com
America's Most Beautiful Bike Ride	6/3/18		Tahoe Amateur Radio Assn	Paul McCaffee KI6OCB	paul.mcafee6243@gmail.com
Pony Express Re-Ride	6/20/2018	6/30/18	SIERA	Jeff Cauhape K7BCV	j_cauhape@yahoo.com
FIELD DAY	6/23/18	6/24/18	SNARS	Jim Shepherd, W6US	nvjims@gmail.com
FIELD DAY	6/23/18	6/24/18	SIERA,	Bob Williams KA6VOC	ka6voc@gmail.com
Death Ride	7/14/18		Tahoe Amateur Radio Assn	Paul McCaffee KI6OCB	paul.mcafee6243@gmail.com
Tahoe Rim Trail	7/20/18	7/22/18	Tahoe Mountain Milers	Doug KA7FOO	ka7foo@gmail.com
NVCON 2018	7/20/18	7/22/18	SNARS	Tony W7XM	w7xm@snars.org
Round Valley Walk/Run	TBD		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
Running With the Bears	8/18/18		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
Vegas to Reno Off Road Race	8/17/18	8/18/18	Best in the Desert Racing Assn	Keith KC7HTK	kc7htkeith@hotmail.com
Tour De Tahoe	9/9/18		Tahoe Amateur Radio Assn	Paul McCaffee KI6OCB	paul.mcafee6243@gmail.com
Reno Air-Races	9/12/18	9/16/18	WC-ARES	Rick Russell KF7KEM	wa6mtty@gbis.com
Edible Pedal 100	9/16/18		Sunrise Rotary Club	Bob Miller WA6MTY	wa6mtty@gbis.com
Grinduro SBTS	TBD		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
Nevada Day Parade	10/27/18		NV AREA NW DEC	John Abrott KD7NHC	jabrott77@gmail.com , cell 775 790-1739
Indian Valley Leaf Peepers	TBD		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net

NOTE: Plumas ARC always have a need for operators. Go over to some beautiful country and help out the Plumas Amateur Radio Club



Board of Directors Meeting

March 14, 2018 – 6:00 PM

Black Bear Diner, Reno

DRAFT MINUTES - To Be Approved on February 14, 2018

1. Call to order at 6:00 PM

Anthony Marcin, W7XM	Yes	Barry Bettman, K6ST	No	Rob Dunbar, NB6C	Yes
Bill Jones, AE7OX	Yes	John Byerl, N7ROJ	No	Wes Vick, KG7QXE	Yes
Jim Shepherd, W6US	No				

Visitors None

2. Approval of Minutes

NB6C moved to approve the Minutes from January 10, 2018 meeting. KG7QXE seconded the motion and the motion passed.

NB6C moved to approve the agenda as presented. W7XM seconded the motion and the motion passed.

3. Reports

President's Report –

New articles of incorporation are in Nevada Secretary of State awaiting approval or comments

NVCON Planning is going good.

SNARS will have a booth at SEPAC to promote NVCON.

W7XM is ordering prizes for NVCON

Working with Elko to intertie repeaters

Secretary Report

Status Report –No Report

Membership Coordinator

Membership Status – Report 343 members

Treasurer

Banking balances as of December 31, 2017: Checking: \$7,156 Savings: \$5,389 PayPal: \$3,198 Convention

Fund: \$7,465 AND Self Insurance: \$780 for a total of \$23988.

Technical Committee - Report

No Report

Control Operators / Trustee - Report

No Report

Events

Nevada QSO Party – Coming along.

Nevada Convention (NVCON) – Ordering \$2,500 in prizes. Next planning meeting Wednesday March 28, 2018 at REOC.

Field Day 2018 will be held at Washoe Lake State Park. We have the larger picnic area next to the boat ramp.

Swap Meet – May 12 either at Boomtown or Cabelas.

Education Team

Working on 1 day tech class

Ham Radio Night at REOC first Wednesday of the month at 6 P.M.

Noon Net

Going well.

4. New Business

5. Next Meeting

The next meeting will be April 11 - Wednesday at 6:00PM – Location TBD.

6. Public Comments

7. Adjournment at 7:02 PM by AE7OX 2nd by W7XM